Appendix A

Summaries of All Animal Populations, Manure Production and its Components and the Effects of Direct Deposit and Indirect **Application of Manure or Litter in the Illinois River Watershed** (IRW) Using Zip Code Calculations.

Table A-A, Summary of animal classes in IRW study area showing their numbers and their contribution to wet manure, its components, and fecal coliform. Values have then been adjusted for natural composting based on stockpiling of manure through piles (dairy), lagoons (swine), and in-house composting (poultry) indicating the adjustment factors. (Source: Refer to Notes in Appendix G)

and

Table A-B Summary of study area as presented in Appendix B. Based on 2002 Census of Agriculture Data Zip Code Data.

and

Table A-D Summary of study area livestock numbers and their manure production as presented in Appendix D.

and

Table A-E, Summary of animal class manure production in IRW study area showing their numbers and their contribution to wet manure and fecal coliform, their rank and percentage of wet manure and fecal coliform. (Source: Refer to Appendix C.).

A-S1 Page 1 1/26/2008

Table A-A , Summary of animal classes in IRW study area showing their numbers and their contribution to wet manure, its components, and fecal coliform. Values have then been adjusted for composting based on stockpiling of manure through piles (dairy), lagoons (swine), and in-house composting (poultry) indicating the adjustment factors. (Refer to Notes in Appendix 6 for Sources)

	Arkansas	Oklahoma	Study Area	Method of Deposit/Harvest Delay			Wet Manure	N	Р	K	Total coliform	Fecal coliform	Fecal Strepcoccus	Per
	Total	Total	Total		Indirect	Factor	Tons	Dry Lbs	Dry Lbs	Dry Lbs				Rec
arms by size ,All farms	2,832	1,650	4,482											
Percent of county farms in zip code area	54.71%	32.99%												
Land in farms, acres	372,078	326,448	698,525											
attle and calves inventroy, number	122,503	77,082	199,585											
eef cow inventory, number	65,058	38,678	103,737	100.00%	0.009	%								_
et Manure Weight, Tons	750,010	445,892	1,195,902				1,195,902							
N, DRY LBS	8,793,223	5,227,695	14,020,918					14,020,918						
P, DRY LBS	2,379,343	2,152,662	4,532,005						4,532,005					
K, DRY LBS	5,431,108	3,228,870	8,659,979							8,659,979				
Total coliforn, x10 ¹⁰ cfu	750,010,219	445,891,617	1,195,901,836			0.00%					1,195,901,836			
Fecal coliform, x10 ¹⁰ cfu	336.211.478	199 882 449	536,093,927			0.00%						536.093.927		
Fecal streptococcus, x10 ¹⁰ cfu	362,073,899	215,258,022	577,331,921			0.00%						,,	577,331,921	
recarstreptococcus, x10 cra	302,073,099	215,256,022	3/7,331,921			0.00%							3/7,331,921	
ilk cow inventory, number	3,411	7,418	10,829	67.00%	22 000	% Note 1								-
et Manure Weight, Tons	48 604	105.692	154 296	07.0076	33.007	16.17%	129,347							-
N, DRY LBS	508,645	1,106,084	1,614,729			21.25%	123,347	1,271,567						4
P, DRY LBS	106,250	231,049	337,299			0.00%		1,2/1,50/	337,299					4
						0.00%			337,299	4 040 500				а
K, DRY LBS	327,794	712,810	1,040,603			0.0072				1,040,603				а
Total coliforn, x10 ¹⁰ cfu	565,161,369	1,228,982,137	1,794,143,506			16.50%					1,498,109,828			а
Fecal coliform, x10 ¹⁰ cfu	8,138,324	17,697,343	25,835,666			16.50%						21,572,782		а
Fecal streptococcus, x10 ¹⁰ cfu	47,473,555	103,234,499	150,708,055			16.50%							125,841,226	ś
	, ,,,,,	, . ,	,,										-,- ,	7
ther Cattle and Calves inventory, number	54,033	30,986	85,019	100.00%	0.009	К.								-
et Manure Weight. Tons	428,956	245,990	674,945	-50.0070	0.007		674,945							-
N. DRY LBS	5,029,134	2,884,016	7,913,149				0,4,545	7,913,149						
P, DRY LBS	1,360,824	780,381	2,141,205					.,525,245	2,141,205					
K DRY IRS	3.106.230	1.781.304	4.887.533						2,141,203	4.887.533				
										4,007,000				
Total coliforn, x10 ¹⁰ cfu	428,955,532	245,989,564	674,945,095			0.00%					674,945,095			
Fecal coliform, x10 ¹⁰ cfu	192,290,411	110,271,184	302,561,594			0.00%						302,561,594		
Fecal streptococcus, x10 ¹⁰ cfu	207,081,981	118,753,582	325,835,563			0.00%							325,835,563	ś
	1 1													
ogs and pigs inventory, number	21,784	362	22,146	0.00%	100.009	% Note 2								-
Wet Manure Weight, Tons	90,655	1,508	92,164			50.00%	46,082							П
N. DRY LBS	1,122,401	18,676	1,141,076			54.00%		524.895						4
P, DRY LBS	388,523	6,465	394,988			0.00%			394,988					4
K. DRY LBS	625,954	10.415	636,369			0.00%			,	636,369				4
Total coliforn, x10 ¹⁰ cfu	45,327,719	754,206	46,081,926			50.00%				,	23,040,963			4
											23,040,303	0.777.540		4
Fecal coliform, x10 ¹⁰ cfu	17,267,703	287,317	17,555,019			50.00%						8,777,510		4
Fecal streptococcus, x10 ¹⁰ cfu	518,031,076	8,619,502	526,650,578			50.00%							263,325,289	1
														_
ogs and pigs other inventory, number	57,922	85,907	143,830	0.00%	100.009	% Note 2								_
Wet Manure Weight, Tons	108,792	161,355	270,147			50.00%	135,073							а
N, DRY LBS	1,346,948	1,997,727	3,344,675			54.00%		1,538,550						а
P, DRY LBS	466,251	691,521	1,157,772			0.00%			1,157,772					а
K, DRY LBS	751,182	1,114,117	1,865,299			0.00%				1,865,299				а
Total coliforn, x10 ¹⁰ cfu	54,395,972	80,677,439	135,073,411			50.00%					67,536,706			а
Fecal coliform, x10 ¹⁰ cfu	20,722,275	30,734,263	51,456,538			50.00%						25,728,269		а
Fecal streptococcus, x10 ¹⁰ cfu	621,668,249	922,027,879	1,543,696,128			50.00%							771,848,064	4
	. ,,	. ,. ,	, ,,,,,,										,- ,	7
eep and lambs inventory, number	1,281	648	1,930	100.00%	0.009	%								_
Wet Manure Weight, Tons	935	473	1,409				1,409							-
N, DRY LBS	19.641	9.941	29,583				2,403	29,583						
P. DRY LBS	4.069	2,059	6,128					23,303	6,128					
K, DRY LBS	14,965	7,574	22,539						0,128	22,539				
Total coliforn, x10 ¹⁰ cfu	420,884	213,029	633,912			0.00%				22,339	633,912			
											033,912			
Fecal coliform, x10 ¹⁰ cfu	935,297	473,397	1,408,694			0.00%						1,408,694		
Fecal streptococcus, x10 ¹⁰ cfu	1,309,416	662,756	1,972,172			0.00%							1,972,172	Ł
orses and ponies of all ages inventory, number	4,707	3,487	8,194	100.00%	0.009	6								
Wet Manure Weight, Tons	48,188	35,704	83,892				83,892							_
N, DRY LBS	566,916	420,047	986,963					986,963						
P, DRY LBS	134,170	99,411	233,581						233,581					
K, DRY LBS	472,430	350,039	822,470							822,470				
Total coliforn, x10 ¹⁰ cfu	415,738,679	308,034,526	723,773,205			0.00%					723,773,205			
Fecal coliform, x10 ¹⁰ cfu	79,368	58.807	138.175			0.00%					, 23, , , 3, 203	138,175		
												136,175		
Fecal streptococcus, x10 ¹⁰ cfu	49,132,753	36,404,080	85,536,833			0.00%							85,536,833	j
							-							_,
OTAL UNITS, NONPOULTRY, DOMESTIC LIVES	тоск						TOTAL UNITS,	NONPOULTR	Y, DOMESTIC	LIVESTOCK				- [
Wet Manure Weight, Tons	1,476,140	996,614	2,472,755				2,266,649							٦
N. DRY LBS	17,386,908	11,664,185	29.051.094				-,,-43	26,285,626	-					٦
P, DRY LBS	4,839,431	3,963,548	8,802,979					20,203,020	8,802,979					4
K, DRY LBS	10,729,664	7,205,130	17.934.793						0,002,979	17,934,793				4
			,,							17,934,793				4
Total coliforn, x10 ⁵⁰ cfu	2,260,010,374	2,310,542,518	4,570,552,892								4,183,941,545			┙
Fecal coliform, x10 ¹⁰ cfu	575,644,855	359,404,759	935,049,614									896,280,950	· · · · ·	-1
		1,404,960,321	3,211,731,249										2,151,691,068	л.
Fecal streptococcus, x10 ¹⁰ cfu	1,806,770,928													з I